

Marine Birds – Cassin's Auklet Foraging Habitat

description

This feature represents the home range of the planktivorous Cassin's Auklets (Ptychoramphus aleuticus) that nest in colonies on Triangle Island in the Scott Islands. Cassin's Auklets were marked with radio tags while at their colony and aerial surveys were performed to detect these birds while at-sea. More information on the surveys can be found in Boyd et al. 2008.

A kernel density estimate was performed by Environment Canada using the telemetry points for Cassin's Auklet for each year from 1999-2001. The feature shows several proportions of the calculated home range determined via the telemetry.



data sources

• Environment Canada (Canadian Wildlife Service) – Cassin's Auklet Telemetry Data, 1999-2001

data resolution

date collected

• 1999-2001

date collected

• 2012

reviewers

• Representatives from Environment Canada (Canadian Wildlife Service)

reviewer comments

- The feature shows areas used by Cassin's Auklet, as assessed by telemetry.
- Information on other species is essential to assess importance of areas to seabirds, as each species has its ecological niche and may use different marine areas.
- could be important.
- Not all individuals were detected at the same rate or consistency and therefore the results could be biased in favour of some individuals who were detected more often than others.

caveats of use

- The density values in an area can change over time in response to natural population fluctuations and changes in habitat conditions (natural or anthropogenic).
- The Cassin's Auklet telemetry data show areas used by birds nesting on the Scott Islands only. The telemetry data do not show areas used by Cassin's nesting on other sites, or during periods other than chick-rearing.
- In order to fully assess use of marine habitats, the distribution determined by at-sea surveys also needs to be considered, as the atinadequate to assess use of the marine environment coast-wide.
- Recommended date of expiry for use of these data in a Marine Planning context: None provided

map, feature data and metadata access

• Visit *www.bcmca.ca/data* for more information.

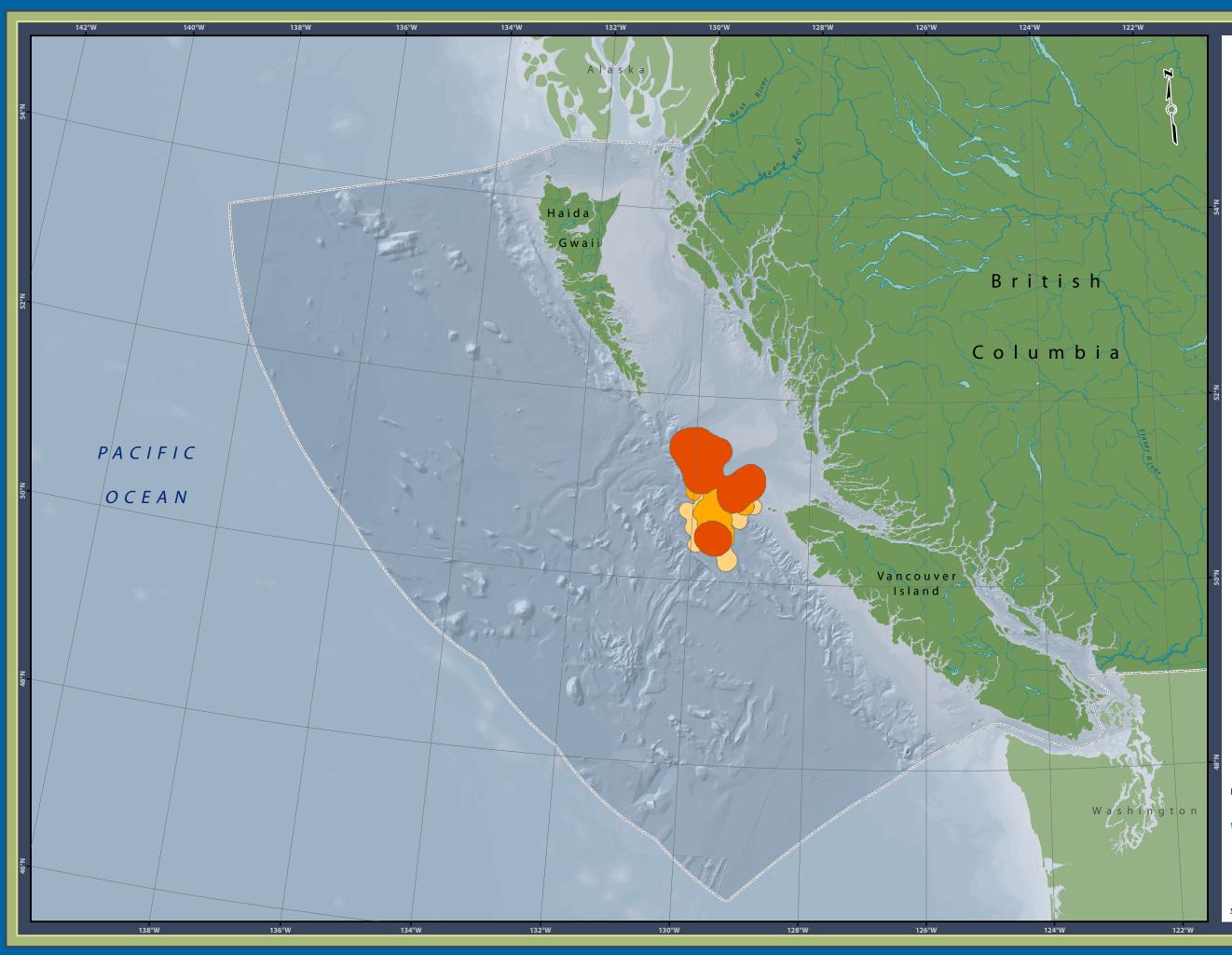
references

• Boyd, W.S., L.M. Tranquilla, J.L. Ryder, S.G. Shisko, and D.F. Bertram. 2008. Variation in marine distributions of Cassin's Auklets (Ptychoramphus aleuticus) breeding at Triangle Island, British Columbia. Auk 125: 158-166.

• It was estimated that the aerial surveys detected the tagged Cassin's Auklets to within 3 km of the true location (Boyd et al. 2008).

• The telemetry data represent the chick-rearing period and do not reflect at-sea patterns prior to nesting, or post fledging, which

sea data includes a longer time period, covers the entire breeding season, and covers the entire coast. The telemetry data alone are



BCMCA Atlas

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Legend

95% home range1999
2000
2001

Note:

- Cassin's Auklet home range from radio-telemetry. Kernel Density Estimate done with Geospatial Modelling Environment software.

Data Sources: Environment Canada (Canadian Wildlife Service)

Base Data:

ESRI Base Data, GeoBase, GeoBC, NOAA, Natural Resources Canada, USGS, Washington State Government

Thematic Data:

For more information on data sources and methods please refer to the facing page to this map

Projection: BC Albers NAD83

| 0 | 25 | 50 | 75 | 100 | 125 | 150 |
|----------------|----|----|----|-----|-----|-----|
| Kilometres | | | | | | |
| 0 | | 25 | | 50 | | 75 |
| Nautical Miles | | | | | | |

1:4,250,000 * * Written scales are approximate and are based on a 11 x 17 inch paper size.

Prepared for:



Map template by Caslys Consulting Ltd. May 10, 2013